## 8-002.01 UPPER SANTA ANA VALLEY - CHINO

### **Basin Boundaries**

### Summary

The Chino groundwater subbasin underlies southeast Los Angeles County, northwest Riverside County, and southwest San Bernardino County. The subbasin is bound on the northwest by the San Jose fault, on the north by the Cucamonga fault and impermeable rocks of the San Gabriel Mountains, and on the east by the Rialto-Colton fault. The subbasin is bound on the southeast by the Jurupa Mountains, Pedley Hills, La Sierra Hills, and the approximate location of the Santa Ana River. The Chino fault and impermeable rocks of the Chino Hills and Puente Hills bound the southwest side of the basin. In some areas, the subbasin boundary coincides with the Chino Basin (1978) groundwater adjudication boundary. The boundary is defined by fifty eight (58) segments detailed in the descriptions below.

## Segment Descriptions

Segment Label	Segment Type	<u>Description</u>	Ref
1-2	Management Area	Begins from point (1) and follows the Chino Basin judgment (1978) boundary to point (2).	{a}
2-3	<sup>E</sup> Alluvial	Continues from point (2) and generally follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks (3).	{b}
3-4	Management Area	Continues from point (3) and follows the Chino Basin judgment (1978) boundary to point (4).	{a}
4-5	Management Area	Continues from point (4) and follows the Chino Basin judgment (1978) boundary to point (5).	{a}
5-6	<sup>E</sup> Alluvial	Continues from point (5) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous metasedimentary rocks of the Jurupa Hills to point (6).	{b}
6-7	Management Area	Continues from point (6) and follows the Chino Basin judgment (1978) boundary to point (7).	{a}
7-8	<sup>E</sup> Alluvial	Continues from point (7) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous metasedimentary rocks of the Pedley Hills to point (8).	{b}
8-9	Non-Alluvial	Continues from point (8) and follows a groundwater barrier resulting from plutonic rocks of the Pedley Hills to point (9).	{b}
9-10	<sup>E</sup> Alluvial	Continues from point (9) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous metasedimentary rocks of the Pedley Hills to point (10).	{b}
10-11	Non-Alluvial	Continues from point (10) and follows a groundwater barrier resulting from plutonic rocks of the Pedley Hills and La Sierra Hills to point(11).	{b}
11-12	<sup>E</sup> Alluvial	Continues from point (11) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous metasedimentary rocks of the Pedley Hills to point (12).	{b}
12-13	Management Area	Continues from point (12) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan to point (13).	{c}
13-14	<sup>E</sup> Alluvial	Continues from point (13) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks to point (14).	{b}
14-15	Management Area	Continues from point (14) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan to point (15).	{c}
15-16	E Alluvial	Continues from point (15) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks to point (16).	{b}
16-17	Management Area	Continues from point (16) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan to point (17).	{c}
17-18	<sup>E</sup> Alluvial	Continues from point (17) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Miocene Sycamore Formation, Monterey Formation, and Glendora Volcanic Rocks that form the Chino Hills and Puente Hills to point (18).	{b}
18-19	Management Area	Continues from point (18) and follows the Chino Basin judgment (1978) boundary to point (19).	{a}
19-1	E Alluvial	Continues from point (19) and follows contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (1).	{b}

<u>Segment</u> <u>Label</u>	Segment Type	<u>Description</u>	Ref
20-20	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (20) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (20).	{b}
21-21	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (21) and follows the contact of Quaternary alluvium with consolidated Tertiary nonmarine sedimentary rocks and ends at point (21).	{b}
22-22	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (22) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (22).	{b}
23-23	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (23) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (23).	{b}
24-24	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (24) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (24).	{b}
25-25	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (25) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (25).	{b}
26-26	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (26) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (26).	{b}
27-27	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (27) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (27).	{b}
28-28	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (28) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (28).	{b}
29-29	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (29) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (29).	{b}
30-30	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (30) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (30).	{b}
31-31	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (31) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (31).	{b}
32-32	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (32) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (32).	{b}
33-33	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (33) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (33).	{b}
34-34	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (34) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (34).	{b}
35-35	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (35) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (35).	{b}
36-36	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (36) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (36).	{b}
37-37	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (37) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (37).	{b}
38-38	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (38) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (38).	{b}
39-39	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (39) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (39).	{b}
40-40	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (40) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (40).	{b}
41-41	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (41) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (41).	{b}
42-42	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (42) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (42).	{b}
43-43	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (43) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (43).	{b}
44-44	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (44) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (44).	{b}

Segment Label	Segment Type	<u>Description</u>	Ref
45-45	E Alluvial	Island within the basin boundary: Begins from point (45) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (45).	{b}
46-46	E Alluvial	Island within the basin boundary: Begins from point (46) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (46).	{b}
47-47	E Alluvial	Island within the basin boundary: Begins from point (47) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (47).	{b}
48-48	E Alluvial	Island within the basin boundary: Begins from point (48) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (48).	{b}
49-49	E Alluvial	Island within the basin boundary: Begins from point (49) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (49).	{b}
50-50	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (50) and follows the contact of Quaternary alluvium with Miocene Puente Formation and ends at point (50).	{b}
51-51	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (51) and follows the contact of Quaternary alluvium with Cretaceous quartz dioritic rocks and ends at point (51).	{b}
52-52	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (52) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (52).	{b}
53-53	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (53) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (53).	{b}
54-54	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (54) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (54).	{b}
55-55	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (55) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (55).	{b}
56-56	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (56) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (56).	{b}
57-57	E Alluvial	Island within the basin boundary: Begins from point (57) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (57).	{b}
58-58	<sup>E</sup> Alluvial	Island within the basin boundary: Begins from point (58) and follows the contact of Quaternary alluvium with Miocene Puente Formation and ends at point (58).	{b}
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# Significant Coordinates

<u>Point</u>	<u>Latitude</u>	Longitude
1	34.072985602	-117.759907231
2	34.170913671	-117.558357888
3	34.172011693	-117.487013666
4	34.092431516	-117.374750137
5	34.047335155	-117.420322858
6	34.017682693	-117.441266283
7	34.005506228	-117.436698455
8	33.978308188	-117.471790931
9	33.977838781	-117.472171314
10	33.976700957	-117.473028527
11	33.961766484	-117.484552256
12	33.948274916	-117.530679268
13	33.947980987	-117.531899728
14	33.947278827	-117.53481502
15	33.94050257	-117.554800191
16	33.911910986	-117.587941787
17	33.892460865	-117.644691379
18	34.045271681	-117.767829938

19	34.071906985	-117.76019681
20	34.173476309	-117.50077121
21	34.173427795	-117.500169834
22	34.171097027	-117.49897134
23	34.170178041	-117.49896262
24	34.169978511	-117.497978139
25	34.04958125	-117.420706778
26	34.04192262	-117.485893924
27	34.040522468	-117.484981798
28	34.020511898	-117.485230509
29	34.01647858	-117.458661698
30	34.010501814	-117.45390172
31	34.017515124	-117.44924887
32	33.980478731	-117.475379735
33	33.983941726	-117.479514146
34	33.97966322	-117.487294995
35	33.983933652	-117.491267366
36	33.985570342	-117.49860719
37	33.989450295	-117.498156518
38	33.988153457	-117.496018038
39	33.989543559	-117.494041683
40	33.995449451	-117.498874748
41	33.957998141	-117.504478401
42	33.954037552	-117.517833551
43	33.960279966	-117.517519646
44	33.960504883	-117.518188006
45	33.959967295	-117.519486257
46	33.957637746	-117.525434625
47	33.955768877	-117.527474409
48	33.944914649	-117.562144475
49	33.932637392	-117.576355518
50	33.99803491	-117.726848942
51	34.043545409	-117.76292976
52	34.173878962	-117.551541795
53	34.175178024	-117.551383283
54	34.171894429	-117.538871973
55	34.183971284	-117.525170046
56	34.177790141	-117.523282812
57	34.172790537	-117.504338547
58	34.033265368	-117.760008573

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http://sgma.water.ca.gov/bbat/?appid=160718113212&subbasinid=8-02.01

#### References

Ref	Citation	Pub Date	Global ID
{a}	California Department of Water Resources (DWR), Adjudicated Basins GIS layer, . URL: https://gis.water.ca.gov/app/bbat/	2016	44
{b}	California Geological Survey (CGS), Geologic Compilation of Quaternary Surficial Deposits in Southern California, T.L. Bedrossian, P. Roffers, C.A. Hayhurst, J.T. Lancaster, and W.R. Short. URL: http://www.conservation.ca.gov/cgs/fwgp/Pages/sr217.aspx	2012	50
{c}	California Department of Water Resources (DWR), Water Agencies Dataset. URL: https://gis.water.ca.gov/app/bbat/	2016	48

Footnotes

I: Internal

E: External